



# Economic Impact Assessment of the Sea Lion Northern Development Area Phase 1 and 2 Project for the Falkland Islands

A Final Report by Hatch  
April 2025

# Navitas Petroleum Development and Production Limited

## Economic Impact Assessment of the Sea Lion Northern Development Area Phase 1 and 2 Project for the Falkland Islands

April 2025

[www.hatch.co.uk](http://www.hatch.co.uk)

# Contents Page

---

|           |   |           |
|-----------|---|-----------|
| <b>1.</b> | <b>Introduction</b>                                 | <b>1</b>  |
| <hr/>     |   |           |
| <b>2.</b> | <b>Assessment Scope and Methodology</b>             | <b>5</b>  |
| <hr/>     |   |           |
| <b>3.</b> | <b>Economic Baseline</b>                            | <b>13</b> |
| <hr/>     |   |           |
| <b>4.</b> | <b>Potential Economic Impacts of Sea Lion</b>       | <b>19</b> |
|           | Impact on the Falkland Islands GDP and FIG Revenues | 19        |
|           | Employment Effects                                  | 21        |
|           | Migration and Population Change                     | 29        |
|           | Housing and Accommodation                           | 31        |

# 1. Introduction

## Requirement for an Economic Impact Assessment of the Sea Lion Project

- 1.1 Navitas Petroleum (hereafter referred to as “Navitas”) has been developing plans for oil production from the Sea Lion basin. A key milestone for this was the submission of an Environmental Impact Statement (EIS) in July 2024. Given the scale and significance of the Sea Lion Northern Development Area Phase 1 and 2 Project (herein after referred to as Sea Lion or the Sea Lion Project), Navitas commissioned a Social Impact Assessment (SIA) of the project. A separate report by Hatch details the full SIA. This report sets out the results of the economic impact assessment undertaken by Hatch. The report sets out the economic impact on the Falkland Islands, of which a number of outputs (particularly in relation to population and housing) will feed into the full SIA.

## Aim and Scope of the Economic Impact Assessment

### Aim

- 1.2 The aim of the economic impact assessment is to robustly estimate the economic impacts of the Sea Lion Project for the Falkland Islands. The study captures direct, indirect and induced impacts, along with the further economic impacts that arise as a result of the expected increase in population on the Islands (“super-multiplier” and “accelerator” effects). The types of impacts assessed are discussed in more detail in the methodology section (Section 2) and in the accompanying *Sea Lion Northern Development Area Phase 1 and 2 Economic Impact Assessment Methodology - Technical Report* (hereafter referred to as *Technical Report*).
- 1.3 The core economic effects are expressed in terms of Full Time Equivalent (FTE) employment. The study also estimates the Gross Domestic Product (GDP) uplift for the Falkland Islands, the likely impacts on revenues to the Falkland Islands Government (FIG), along with the potential population and housing effects. The results then help inform the wider SIA.

### Scope

- 1.4 The scope of the economic impact assessment covers the economic impact of construction activity associated with developing the Sea Lion Project as well as activity associated with the production of oil from the exploitation of reserves in the Sea Lion basin.
- 1.5 Given the history of the Sea Lion Project, which is discussed below (paragraphs 1.8 to 1.11), several assessments have been undertaken on the Project’s potential economic and social effects, for example, the most notable is a 2013 report for FIG on the socio-economic effects of oil and gas (O&G) development<sup>1</sup>. Much has changed since that report, and the project is now very well defined (the 2013 report was based on broad scenarios, given the uncertainty and relatively early-stage nature of the project at the time). Nonetheless, the 2013 study provides the best framework for considering the types of effects generated by the project, as well as an appropriate economic modelling structure.

<sup>1</sup> Regeneris Consulting – now Hatch – (2013) Socio-economic study of O&G Development in the Falkland Islands.

- 1.6 This study therefore revisits and updates the 2013 economic model to estimate the economic impact of the Sea Lion Project, based on updated assumptions and baselining. The scope and assessment approach draws from the 2013 study, but is often able to use more detailed inputs and more granular assumptions, taken directly from Navitas data, which is consistent with the latest business planning assumptions.
- 1.7 When scoping the assessment, attention has been paid to the specific nature and size of the Falkland Islands. The Falkland Islands are capacity-constrained and operate at virtually full employment. Therefore, large injections of economic activity, such as those required for O&G production, will result in increases in population through migration. Increases in population have significant knock-on impacts on the economy in the form of increased demand for housing, public services, and other consumer goods and services. This study models these feedback loops as “super-multiplier” effects on public service jobs (FTEs) and “accelerator” effects on construction jobs (FTEs)<sup>2</sup>.

### Background & History of the Sea Lion Oil Field

- 1.8 The Sea Lion Oil Field was discovered in 2010 and appraised in 2011. The field is located in the North Falklands Basin in the South Atlantic, 220km to the north of the Falkland Islands in Production Licences PL032 and PL004b granted by FIG. O&G resources are trapped in underground sandstone rocks approximately 2.5 km below the seabed, in water depths of approximately 450 metres. The proposed Phase 1 and Phase 2 development of Sea Lion Project is in license blocks PL032 and PL004, owned by held by Navitas and Joint Venture Partner Rockhopper Exploration. Overall, the field is estimated to contain 791 million barrels (mmbbls) of recoverable crude oil resources<sup>3</sup>.
- 1.9 There have been numerous key milestones the fields history, the most relevant of which include:

- In 2012, Premier Oil acquired a 60% interest in Rockhopper's exploration licenses in the North Falkland Basin. They completed their exploration program in 2015/2016.
- A draft Field Development Plan for the project was submitted for discussion with the FIG in November 2017.
- The Sea Lion Project's front end engineering design concluded in 2019 and the Environmental Impact Assessment was completed in 2020.
- In March 2021, Premier merged with Chrysaor to create Harbour. Navitas signed a detailed Heads



Source: Navitas (2023)

<sup>2</sup> See Section 2 and the *Technical Report* for details.

<sup>3</sup> [Sea Lion Corporate Update • Rockhopper Exploration plc.](#)

of Terms agreement to acquire Harbour’s interest in the project, after Harbour abandoned plans to advance with the project. Premier Oil sold its Falkland Islands Business Unit to Navitas in September 2022.

1.10 Since Navitas acquired the Sea Lion licences, the Development has evolved in terms of:

- A reduction in number of wells and subsea infrastructure;
- The design of the wells uses 'Open Hole Gravel Pack' completions in the production wells, which are installed where the well meets the hydrocarbon reservoir, and which do not require conventional explosive perforation guns;
- The proposed daily production figures and hence the size and efficiency of the Floating Production, Storage and Offload (FPSO) vessel such that the forecast atmospheric emissions per barrel are reduced; and
- There is a longer proposed Field Life with increased recoverable resources.

1.11 As a result of these changes, it was necessary to conduct another Environmental Impact Assessment to submit to FIG. This was submitted for consultation in July 2024. Following this a statutory period of consultation ran from the 2nd of July 2024 to the 13<sup>th</sup> of August 2024<sup>4</sup>.

### Development Scenario for Sea Lion

1.12 The development of Sea Lion Project is anticipated to begin in 2025. The Project is split across multiple phases and is anticipated to have a field Life of 30 years. From Q4 2033 to the end of the project in 2057, there is a period of steady state production. Table 1.1 below delineates the various stages of developing Sea Lion, as well as the corresponding phases and activities.

| Development Phase                        | Stage                           | Key Activities and Component   |
|--|---------------------------------|--|
| Phase 1<br>(October 2025 to August 2030) | Stage 1: Pre-first Oil Drilling | <ul style="list-style-type: none"> <li>• Use of onshore supply base, liquid mud plant, and a Temporary Dock Facility</li> <li>• Commissioning and operation of onshore production support and drilling support bases</li> <li>• Anchoring of two Large Transport Vessels in Berkeley Sound at any one time</li> <li>• Commissioning and operation of an onshore drilling mud plant</li> <li>• Use of an existing Temporary Dock Facility</li> <li>• Drilling, completion and suspension of the first set of wells using a Mobile Offshore Drilling Unit</li> <li>• Installation of anchor and mooring systems, turret buoys, and offshore subsea production infrastructure</li> <li>• Arrival, installation, hook-up and commissioning of FPSO</li> <li>• Use of supply and support vessels &amp; Emergency Response and Rescue Vessels</li> <li>• First-oil with production operations commencing from first completed Phase 1 wells</li> </ul> |
|  | Stage 2a: First Simultaneous    | <ul style="list-style-type: none"> <li>• Use of onshore supply base, liquid mud plant, and a Temporary Dock Facility</li> </ul>  |

<sup>4</sup> [Environmental Impact Statement - Navitas](#)

| Development Phase                             | Stage                            | Key Activities and Component  |
|---|----------------------------------|---|
|   | Operations (SimOps) (7 months)   | <ul style="list-style-type: none"> <li>• Anchoring of Large Transport Vessels in Berkeley Sound</li> <li>• Drilling and completion of remaining Phase 1 wells using a Mobile Offshore Drilling Unit</li> <li>• Installation of remaining subsea production infrastructure</li> <li>• Production operations of 11 subsea wells from the FPSO</li> <li>• Direct offtake of crude from FPSO to the purchaser’s Conventional Trading Tanker</li> <li>• Use of supply and support vessels and Emergency Response and Rescue Vessel</li> </ul>  |
|   | Stage 3: Steady State Production | <ul style="list-style-type: none"> <li>• Production operations of up to 11 subsea wells controlled from the FPSO</li> <li>• Ongoing use of onshore supply base and TDF</li> <li>• Direct offtake of crude from FPSO to purchaser’s Conventional Trading Tanker for export to oil market</li> <li>• Use of supply vessels and Emergency Response and Rescue Vessel on standby to support operations in the field</li> </ul>  |
| Phase 2 (September 2030 to October 2032)      | Stage 2b: Second SimOps          | <ul style="list-style-type: none"> <li>• Use of onshore supply base, liquid mud plant, and TDF</li> <li>• Anchoring of Large Transport Vessels in Berkeley Sound</li> <li>• Drilling and completion of 12 Phase 2 wells from a Mobile Offshore Drilling Unit</li> <li>• Installation of remaining subsea production infrastructure</li> <li>• Production operations of all subsea wells controlled from the FPSO</li> <li>• Direct offtake of crude from the FPSO to the purchaser’s Conventional Trading Tanker</li> <li>• Use of supply and support vessels and Emergency Response and Rescue Vessel</li> </ul> |
| Phases 1 & 2 Complete (December 2032 to 2057) | Stage 3: Steady State Production | <ul style="list-style-type: none"> <li>• Production operations of up to 23 subsea wells controlled from the FPSO</li> <li>• Ongoing use of onshore supply base and a Temporary Dock Facility</li> <li>• Direct offtake of crude from FPSO to purchaser’s Conventional Trading Tanker for export to oil market</li> <li>• Use of supply vessels and Emergency Response and Rescue Vessel on standby to support operations in the field</li> </ul>  |
|   | Stage 4: Decommissioning         | Not considered in the Environmental Impact Assessment   |

Source: Information shared by Navitas, 2025.

## 2. Assessment Scope and Methodology

### Study Area

- 2.1 The study area includes the entirety of the Falkland Islands territories, including terrestrial and marine territories. It should be noted that there will also be transboundary impacts on other economies, in particular through the supply chain expenditure of Navitas for the Sea Lion Project. The economic impact of these activities is not considered further here, as the assessment is focused solely on impacts on the Falkland Islands.

### Key Development Scenario Parameters

- 2.2 The study parameters are based on the development scenario outlined in Section 1 above (see Table 1.1 as well as a more detailed project description set out in the SIA), therefore the economic impact assessment aligns with the development scenario assessed in the SIA, and the EIS.<sup>5</sup>

### Data Sources Used in the Economic Impact Assessment

- 2.3 Key data sources and their relevance for the assessment are set out in Table 2.1 below.

| Data Source  | Sections used and relevance to the economic impact assessment   |
|--|---|
| FIG Directorate of Policy, Economy & Corporate Services, 2024. <a href="#">Falkland Islands Census Report</a><br>2016-2021 Census, FIG | <ul style="list-style-type: none"> <li>Used to describe a wide range of indicators (including population and employment) set out in the economic baseline environmental described in Section 3</li> <li>Used to inform assumptions used to derive employment impacts detailed in the <i>Technical Report</i></li> <li>Used to compare population changes between 2016 and 2021</li> </ul> |
| United Nations Department of Economic and Social Affairs, Probabilistic Population Projections (2024)                                  | <ul style="list-style-type: none"> <li>Used to provide population projection estimates throughout the lifecycle of the project, including upper and lower confidence intervals</li> <li>Used for sense-checking population increase estimates</li> </ul>  |
| Falkland Islands Legislation, Tax Ordinance (1997) 28(1)(2)  | <ul style="list-style-type: none"> <li>Used to apply relevant corporation tax rates to estimated Navitas profits</li> </ul>   |
| Falkland Islands Legislation, Offshore Petroleum (Licensing) Regulations (2000)  | <ul style="list-style-type: none"> <li>Used to apply relevant royalty rates to estimated Navitas petroleum revenues</li> </ul>  |
| FIG Directorate of Policy, Economy & Corporate, National Accounts 2023 (published 2024)  | <ul style="list-style-type: none"> <li>Used to obtain macroeconomic data on the Falkland Island economy, including sector sizes and GDP</li> </ul>  |

<sup>5</sup> [Environmental Impact Statement - Navitas](#)

## Economic Impact Assessment Methodology Overview

- 2.4 The methodology is described in more detail in the *Technical Report*. This section provides an overview..

### Types of economic impact

- 2.5 The study estimates the FTE jobs created, Falkland Islands GDP uplift and FIG revenues generated by developing the Sea Lion oilfield in accordance with UK and industry-specific best practices. The assessment considers and quantifies the following effects:

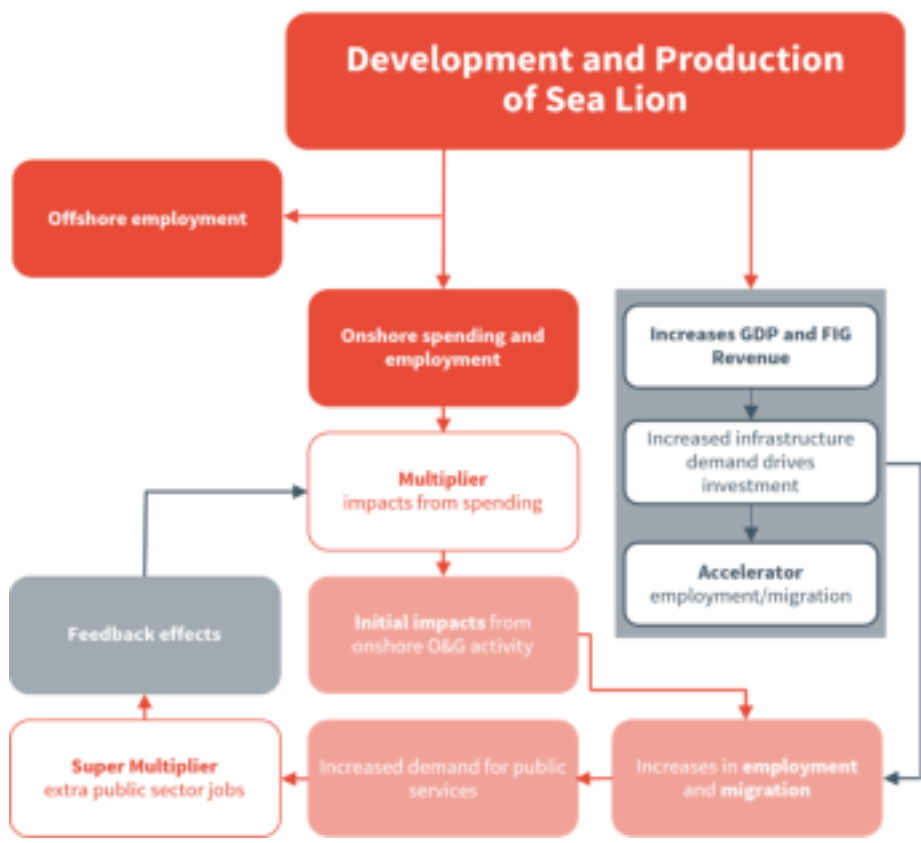
- 1) **Gross uplift in direct GDP:** This is driven by the profit from O&G activity associated with Sea Lion. *The uplift in direct GDP is measured using the latest assumptions on revenue and production cost from Navitas, by year, throughout the project.*
- 2) **Gross increase in FIG revenues:** Increases in Government revenues will be driven by payment of corporation tax on O&G profits and payment of royalties on O&G revenues associated with the Sea Lion Project. *This has been estimated using Navitas's latest projections on revenues, profits and corporate tax contributions from the Sea Lion Project, by year.*
- 3) **Creation of onshore<sup>6</sup> direct jobs:** The Falkland Islands jobs directly employed by Navitas and primarily based on the Falkland Islands (rather than offshore). *These have been estimated using data from Navitas, split by job type by phase and by year.* Some of the roles are referred to as back-to-back (B2B). This terminology is used where two workers share the same job but work on alternating shifts. This is common in offshore and remote site operations, where continuous coverage is needed. Typically, one worker will be on duty for a set period (e.g., 28 days on) while the other is off (e.g., 28 days off), and then they switch.
- 4) **Creation of onshore indirect jobs:** Falkland Island employment opportunities that are created in the supply chain required for the construction and operation of the Sea Lion Project. These jobs typically arise across different sectors due to the types of economic activity generated by the primary O&G operations. *These are estimated using inputs from Navitas on the likely supply chain requirement in terms of jobs, by job type, phase and by year.*
- 5) **Onshore induced jobs:** Jobs supported by the personal spending increases associated with the gross increase in direct and indirect jobs. Examples include jobs created as a result of increased demand for accommodation, food services, and retail due to the influx of workers to the Falkland Islands. *These are modelled using data on salaries, assumptions on local spending, and an economic impact model, detailed in the Technical Report.*
- 6) **Super multiplier jobs:** Public service jobs required as a direct result of the Sea Lion and to support the rise in population caused by the development of Sea Lion. They consist of

<sup>6</sup> Onshore and offshore in this instance is tied to the physical location of the job's primary activities rather than the physical location of infrastructure. For example, a job that is required to maintain offshore operations but is based on the Falkland Islands would be categorised as an onshore job here whereas a job that is based primarily offshore would be defined as an offshore job.

jobs in education, O&G regulation, and other public services (e.g. health, leisure services, emergency services). *These have been estimated based on consultation with FIG.*

- 7) **Accelerator construction jobs:** Jobs required to build the necessary public infrastructure (additional to the Sea Lion Project infrastructure). *These are estimated using data from Navitas and from FIG on assumed infrastructure requirements, associated capital costs and timings, and our economic impact model.*
- 2.6 It should also be noted that given the increase in its revenues, FIG will have options for discretionary expenditure on the Falkland Islands (e.g. through additional capital investment, public services or reduced income taxes). It was agreed in the scoping phase of the economic impact assessment that these would be scoped out of the assessment due to the uncertainties on what choices FIG might decide to make.
- 2.7 Figure 2.1 below summarises the Economic Impact Assessment Framework. This shows that onshore spending and employment has multiplier effects that lead to overall increased spending (the initial impacts from onshore O&G activity), which in turn lead to increased employment. An important part of the model is that, given that the Falkland Islands are essentially at full employment, immigration will be needed in order to fill the jobs created as a result of the Project. Some of the roles are expected to be filled by existing Falkland Islands residents, but where this is the case, this creates a back-fill requirement for the displaced job. This back-fill requirement in itself creates a need for immigration and has been factored into the economic impact model, including the assumed rise in population and demand for housing.
- 2.8 The Sea Lion project and the rise in population leads to an increased demand for public services and associated jobs in areas such as O&G regulation and education, which in turn drives more immigration. This is the “super multiplier” effect feedback loop.
- 2.9 Navitas will also be undertaking additional capital expenditure in the Falkland Islands on infrastructure such as housing. Concurrently, increased FIG revenues and GDP uplift of developing the Sea Lion Project could lead to increased public spending in infrastructure and potential uplift in investment, creating “accelerator” jobs to meet demand for infrastructure and/or housing.

Figure 2.1 Economic Impact Assessment Framework Diagram



Source: Hatch 2024

### Key data sources, assumptions and inputs

2.10 This study uses a variety of different assumptions and inputs. These are summarised in Table 2.2 and outlined in more detail in the *Technical Report*. We provide a brief overview of key assumptions after Table 2.2.

Table 2.2 List of Key Data Sources, Assumptions and Inputs for the Economic Impact Assessment

| Assumption/Input   | Phase(s)                     | Source(s)           | Further Info / Justification  |
|--|------------------------------|---------------------|---|
| <b>A – Falkland Islands GDP uplift</b>                       |                              |                     |   |
| Navitas Sea Lion Project oil production, revenue and profits | Construction and operational | Navitas             |   |
| Earnings/Employment costs                                    |                              |                     |   |
| Other components of employment costs (pension contributions) |                              | UK benchmarks       |   |
| <b>B – Increases in FIG revenues</b>                         |                              |                     |   |
| Corporation tax  | Operational                  | FIG Taxation Office | 21% for profits less than £500,000, 26% for profits in excess of £500,000 |

| Assumption/Input  | Phase(s)                     | Source(s)  | Further Info / Justification   |
|---|------------------------------|--|--|
| Royalties   |                              | Offshore Licensing Regulations (1995 and 2000) <sup>78</sup> | 9% of delivered or relevantly appropriated petroleum                             |
| Forecast oil price (\$/bbl)   |                              | Navitas  | \$73.98  |
| Forecast USD/GBP exchange   |                              | Navitas  | \$1 = £0.80  |
| Navitas Sea Lion Project oil production, revenue and profits              |                              | Navitas  |  |
| <b>C – Induced jobs</b>   |                              |  |  |
| Local spend of income groups (% of gross pay)                             |                              | iCalculator – Falkland Islands, Hatch calculations           | Taxation and savings/remittances assumptions                                     |
| Number of local and expat workers   | Construction and operational | Navitas  | -  |
| Household expenditure, by sector  |                              | Household Expenditure Survey (2011)                          | -  |
| Median Falkland Island annual income                                      |                              | Falkland Islands Census Report (2021)                        | -  |
| Employment generated: (FTE) by £1m spent by direct and indirect employees |                              | Hatch calculations based on above induced jobs assumptions   |  |
| <b>D – Super multiplier jobs</b>  |                              |  |  |
| Ratio of working immigrants and their dependants                          | Construction and operational | Census 2021 data, Hatch calculations based on Navitas data   | -  |
| Ratio of working immigrants and their children                            |                              |  | -  |
| Share of immigrant children as immigrant dependants                       |                              |  | -  |
| Extra school jobs (FTE)/100 new children                                  |                              | FIG Consultation   | Navitas HR and payroll data  |
| Extra public sector jobs/100 extra people                                 |                              |  | Navitas HR and payroll data  |
| Extra O&G regulatory jobs   |                              |  | -  |
| <b>E – Infrastructure accelerator jobs</b>                                |                              |  |  |
| Navitas CapEx on local infrastructure                                     | Construction                 | Navitas  | -  |
| Type of infrastructure  |                              |  | -  |
| Project start and end dates   |                              |  | -  |
| Labour cost component   |                              | -  |  |
| Blended annual labour cost for construction sector                        |                              | Consultation with local businesses (conducted in 2013)       | Hourly labour and craft rates (also from consultation); FIG inflation data (RPI) |
| Hours worked per week (construction)                                      |                              |  | -  |
|   |                              |  |  |
| <b>F – Housing, accommodation, immigration</b>                            |                              |  |  |
| Accommodation/housing provided by Navitas                                 | Construction and operational | Navitas  | -  |
| Cost of building a home   |                              | Discussion with Navitas                                      | -  |

<sup>7</sup> [Falkland Islands Legislation](#)

<sup>8</sup> [Falkland Islands Legislation](#)

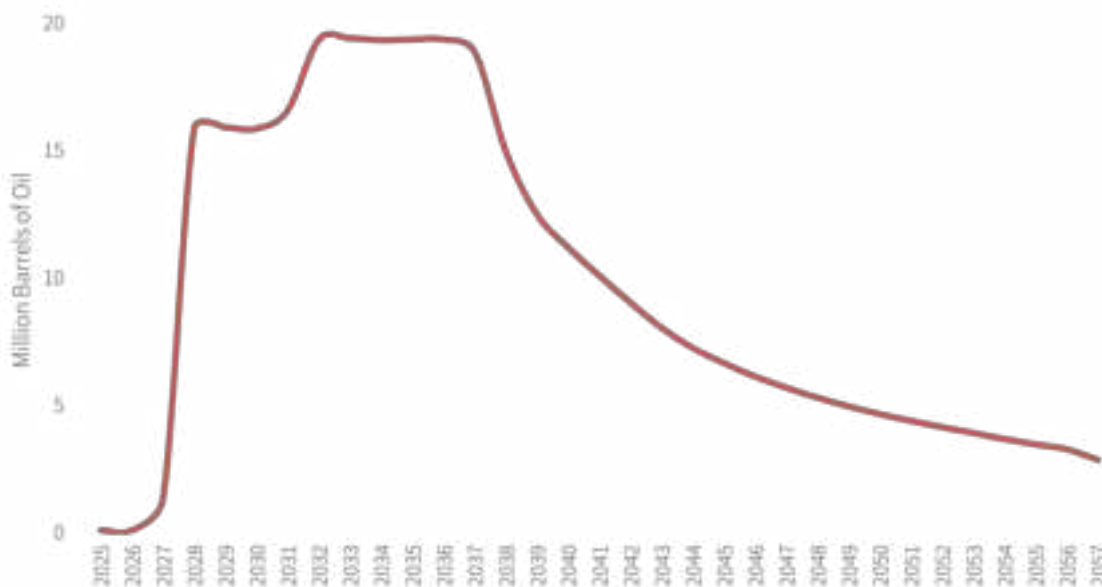
| Assumption/Input   | Phase(s) | Source(s)  | Further Info / Justification   |
|--|----------|--|--|
| House per additional worker (direct, indirect, induced and super multiplier) |          | Navitas and Regeneris report (2013)                                      | Total direct, indirect, induced and super multiplier jobs.   |
| Total migration to Falkland Islands  |          | Hatch calculations based on Census 2021 data and Navitas employment data | Navitas HR data, ratio of working immigrants and their dependents, share of immigrant children as immigrant dependants |

Source: Hatch 2024

### Assumed Oil Production

- 2.11 A key parameter of this study, which underpins the estimates for GDP uplift and FIG revenues, is the expected annual oil production. This has been projected by Navitas and is visualised in Figure 2.2 below.
- 2.12 The highest years of production are expected to be between 2031 and 2036, with an average flow rate of 18.81 mmbbls/year. The outright peak is expected to be in 2033 with a flow rate of 19.31 mmbbls. Spudding<sup>9</sup> is anticipated to occur in December 2026, and first oil is expected to follow a year later in December 2027.
- 2.13 The first steady state production is expected to run between August 2028 to August 2030, with an average expected output of 15.78 mmbbls. This precedes the building of the last 14 wells during the second SimOps between September 2030 and October 2032. From 2033 to 2057, during the second steady state, there is a logarithmic decline in oil flow.

Figure 2.2 Anticipated oil flow rate of Navitas Sea Lion (mmbbls)



Source: Navitas

<sup>9</sup> Spudding refers to the initial phase of drilling a new well. This process involves using a large drill bit to create a surface hole, which is then lined with casing and cement to protect nearby groundwater from contamination.

## Government Revenues

- 2.14 Pursuant to the Falkland Islands' Taxes Ordinance (1997)<sup>10</sup>, corporation tax is modelled as follows:
- 21% for profits up to £500,000.
  - 26% for profits in excess of £500,000.
- 2.15 We have taken Navitas's latest estimates on corporate tax payments from the project, which take into account historic losses and depreciation. Revenues from offshore O&G exploration are also subject to royalty payments to FIG, pursuant to Offshore Petroleum (Licensing) Regulations (2000)<sup>11</sup>. The royalty amounts to 9% of all petroleum delivered or relevantly appropriated. The royalty rate may, in actuality, be lower than 9% in some time periods, as any "such lesser percentage as the Governor may by notice to the Licensee"<sup>12</sup>. Nevertheless, for the purposes of the modelling in this study, a 9% rate is assumed throughout the project.
- 2.16 Though not calculated, FIG can also expect revenues from income taxes paid by Navitas onshore and offshore employees prior to oil-related revenues, as well as further income tax receipts in the longer term, resulting from the induced and super multiplier employment effects.

## Jobs

- 2.17 Direct and indirect jobs data, including remuneration and job type, has been provided by Navitas based on the latest business plan, split by year. Induced jobs are estimated based on employee earnings linked to the Sea Lion Project, while in the Falkland Islands, and local spending patterns of direct and indirect employees.
- 2.18 Jobs in public services are sourced through consultation with FIG and focus on:
- Additional O&G regulatory jobs in the public sector;
  - Additional education jobs in the public sector;
  - Other additional public services and associated jobs in the public sector; and
  - There will be a secondary induced effect associated with super multiplier jobs.
- 2.19 The 2013 study conducted by Regeneris Consulting assumed increased housing demands resulting from the increased direct and indirect employment, but also immigrants back-filling induced and super multiplier jobs. Detailed assumptions are set out in the *Technical Report*.

## Population

- 2.20 Population assumptions are derived from the estimated increase in the workforce resulting from direct, indirect, induced and super multiplier jobs<sup>13</sup>. The proportion of jobs created that are taken up by migrant workers, the number of additional people (dependents) that come with the migrant workers and any additional workforce impacts associated with increases in population are estimated using data provided by Navitas and from FIG consultations, as well as Census 2021 data on immigrants. Assumed factors that may trigger population increases are listed below:

<sup>10</sup> [Falkland Islands Legislation | Taxes Ordinance \(1997\) 28\(1\)\(2\)](#)

<sup>11</sup> [Falkland Islands Legislation | Offshore Petroleum \(Licensing\) Regulations \(2000\)](#)

<sup>12</sup> [Falkland Islands Legislation | Offshore Petroleum \(Licensing\) Regulations \(2000\)](#)

<sup>13</sup> Temporary construction jobs will not lead to permanent population increases and so are excluded here.

- **New jobs that need to be directly filled by migrants:** Navitas has indicated where this is the case, in detailed employment projections data shared with Hatch;
- **Existing jobs that become vacant:** Which is would be the result of the recruitment of a local worker for a newly created job;
- **Immigration of dependents:** For long-term jobs (particularly in the operational phase) workers may bring additional dependents with them, which will result in further increases in population; and
- **Additional population increases from increased demand for public services and infrastructure:** The above increases in population will see additional demands on public services and infrastructure which will lead to further increases in the population.

## Limitations

### Data limitations

- 2.21 In an effort to maintain the highest levels of accuracy, Hatch uses the most up-to-date and reliable data available (at the time of the data collection) from Navitas, FIG and other sources. Nevertheless, in some instances the most up-to-date data may already be a few years old, as there is often a lag in the publication of socio-economic and macro-economic datasets. For example, the Census is only carried out every five years on the Falkland Islands and the National Accounts are inherently retrospective.
- 2.22 It should be noted that expat rotational B2B roles, for the purposes of estimating employment and population uplift are counted as one person per role, but in actuality will be people rotating on-and-off the Falkland Islands. The reasoning is that it is assumed that outbound rotational workers may spend their time 'off' overseas.

### Uncertainties

- 2.23 There are key uncertainties attached to many of the assumptions used in the economic impact assessment, such as future oil prices and the USD/GBP exchange rate which, in reality, will both fluctuate during the course of the project. Long-term average assumptions provided by Navitas for both are used.
- 2.24 Fluctuations in oil prices are not expected to have a significant effect on the predictability or accuracy of job creation estimates. However, any significant fluctuations, may pose material effects for estimates of FIG tax and royalty revenues as well as GDP uplift in the longer-term. It is also worth noting that demand for oil, and therefore oil prices, may be impacted by energy transition policy and wider (geo)politics. Hence, FIG revenues and GDP uplift estimates may also be impacted.

## 3. Economic Baseline

- 3.1 The Falkland Islands are a UK Overseas Territory in the South Atlantic Ocean, some 480 km off the coast of South America. The total land area is over 12,000 km<sup>2</sup> across an archipelago of over 700 islands. The largest islands are East Falkland (~6,700 km<sup>2</sup>) and West Falkland (~5,300 km<sup>2</sup>).
- 3.2 The economic baseline provides a cross-sectional overview of the Falkland Islands' economy, as well as a general summary of the demographics of the Falkland Islands. This includes a summary of the Falkland Islands' resident and non-resident populations, and anticipated population projections throughout the course of the development of the Sea Lion Project. The economic baseline also takes stock of the current state of the Falkland Islands economy, including its size, sectoral composition, employment rates and average earnings on the Islands.
- 3.3 The social baseline (provided in the SIA) complements this economic baseline by providing a wider set of indicators, some of which are relevant to the economic baseline such as indicators related to education and tourism.

### Falkland Islands Population

#### Resident Population

- 3.4 The usual permanent resident population, indicated in the latest 2021 census, is 3,662 people, including 353 people living at Mount Pleasant Complex/Airport (MPA) and marine vessels.
- 3.5 Stanley, the capital, has 2,538 inhabitants (80% of the total population) and has seen its population grow very modestly in recent years, by 78 people or +3%, from 2016 to 2021.
- 3.6 Of the total population across the Falkland Islands in 2021, 72% are of working age (aged 15-64), 16% are 14 or younger and 12% are aged 65 and over. This compares to the working age population accounting for 63% of the population in the 2021 England and Wales Census, followed by both the 0-15 and 65 and over age groups, accounting for 19%. The average age of Falkland Islanders is 40 years old (increasing from 38 in 2016).
- 3.7 According to the 2021 Census, the estimated usually resident population of the Falkland Islands, including citizens living at Mount Pleasant, has increased from 3,398 in 2016 to 3,662 in 2021 (approximately 8% increase).

#### Non-Resident Population

- 3.8 As per the 2021 Falkland Islands Census, 64% of the total population are Falkland Islanders. The second-largest share of the population are those with work permits and accompanying dependant permits (20% - 497 people altogether), followed by residence permit-holders (12% - 292 people). 60% of the population who possess a work permit are resident in Stanley, followed by 37% in Mount Pleasant and 3% in Camp<sup>14</sup>.

<sup>14</sup> Rural areas outside Stanley and Mount Pleasant.

## Economy

### GDP

- 3.9 The GDP of the Falkland Islands in 2023 was £280.4 million Falkland Islands Pounds (FKP, £)<sup>15</sup>. In recent years (2011-2023), GDP has grown by an average of 4.7% per year, with this change in GDP being shown in Figure 3.1.
- 3.10 Currently, GDP per capita is estimated to be £83,570. However, much of this does not flow to Falkland Islanders due to leakages such as taxes, savings, or remittances and other overseas payments that corporations might make. For that reason, Gross National Income (GNI), which represents the income received by residents of an economy, regardless of where the activity generating that income takes place, is significantly lower at £57,000.

Figure 3.1 Falkland Islands GDP time series



Source: FIG Directorate of Policy, Economy & Corporate Services, 2024. Falkland Islands National Accounts for 2023.

- 3.11 Fishing and aquaculture are the largest sectors of the economy and account for 58.6% (£164.3 million) of GDP in 2023<sup>16</sup>. GVA created annually by the fishing and aquaculture industry peaked at £164.5 million in 2016. Given that there is currently no industrial scale aquaculture on the Falkland Islands, it is assumed that the impact is primarily sourced from fishing of wild fish rather than farmed fish.
- 3.12 Due to the importance of the fishing and hydrocarbon sectors to the economy, annual GDP is highly volatile, with the single highest annual jump of 32.1% between 2015 and 2016 being due to the 2015-16 exploration campaign economic activity of the Zebedee, Isobel Deep and Isobel-Elaine oilfields.<sup>17</sup>

<sup>15</sup> Please note that the Falkland Islands pound is pegged to the £GBP i.e. the exchange rate is 1:1.

<sup>16</sup> FIG Directorate of Policy, Economy & Corporate, 2024. [National Accounts 2023](#)

<sup>17</sup> [Rockhopper Exploration – Discovery of the Zebedee, Isobel Deep and Isobel-Elaine.](#)

- 3.13 Whilst the economy has diversified in recent years, public sector remains significant, and it contributes some £34.3 (12.3%) million to GDP. Other major sectors include wholesale and retail trade (10.6% of GDP), construction (3.4% of GDP) and real estate activities (2.9% of GDP).
- 3.14 More recently, the O&G sector has played an increasingly important role in the Falkland Islands economy, though the sector has been very volatile as activity levels vary greatly. Nevertheless, the sector currently makes up only 3.4% (£9.6 million)<sup>18</sup> of GDP. These contributions pertain to the economic activity of O&G licensee holders, and so they are not limited just to exploration and extraction. The main activities supported by O&G license holders include construction, transportation and storage, accommodation and food services activities, and professional, scientific and technical activities (the main activities of O&G licence holders listed are constrained to years in which there has been operational activity - e.g. exploration campaigns). Figure 3.2 below shows the overall GVA of each sector in the Falkland Islands in 2023.

Figure 3.2 GVA by broad industry group (2023, £ millions)



Source: Falkland Islands National Accounts 2013-2023, p.8

## Employment

- 3.15 In 2021 there were 1,881 core working-aged people employed in the Falkland Islands and an additional 147 people aged 65 and over also employed (excluding Mount Pleasant)<sup>19</sup>. Total numbers in employment have increased by 10% since 2016, when only 1,708 people were employed. The labour force participation rate on the Falkland Islands was very high in 2021 at 89%.

<sup>18</sup> FIG Directorate of Policy, Economy & Corporate Services, 2024. [National Accounts 2023](#)

<sup>19</sup> FIG Directorate of Policy, Economy & Corporate Services, 2024. [Falkland Islands Census Report](#).

- 3.16 The largest employer on the Falkland Islands is FIG, accounting for 22.6% of all employment. Other major sectors include business services, administrative and support service activities (14.4% of employment), construction (10.4% of employment), wholesale and retail trade (9.3% of employment) and agriculture (8.2% of employment).

### Earnings

- 3.17 In 2021, the median income for all people employed in the Falkland Islands was £24,000<sup>20</sup>. This is a 7% increase on the median income in 2016. For a benchmark, it compares with £31,224 in the UK in the same year.
- 3.18 The proportion of people working on the Falkland Islands who earn £15,000 or less has decreased from 25% of workers to 21% of workers between 2016 and 2021.
- 3.19 On average, permanent residents are more likely to have lower annual incomes from employment than temporary residents, with permanent residents' mean average earnings sitting at £29,300, compared to the £31,000 mean average of temporary residents.<sup>21</sup>

### FIG Revenue

- 3.20 FIG revenues for the 2023/24 financial year were circa £120 million<sup>22</sup>. This revenue primarily comes from corporation and personal tax receipts, fishing licence fees and investment income.

### Housing and Accommodation

- 3.21 The 2021 Census recorded a total of 1,352 resident households across the Falkland Islands. This represents a slight increase (14%) from the 1,189 total households in the 2016 Census<sup>4</sup>.
- 3.22 Of the total households on the Island in 2021, 1,148 (89%) are in Stanley. However, despite the growth of housing there is an ongoing shortage of affordable housing in Stanley, which is acknowledged as a critical constraint the economic development and population growth in the Falkland Islands<sup>23</sup>. The average household size was 2.8 bedrooms with 2.3 persons.
- 3.23 As shown below, most houses in Stanley were mortgaged or owned outright (54 %), but four in ten were held under rental, while a further 5% were provided rent free as part of an employment package<sup>2</sup>. Currently only residents with a Permanent Resident Permit, full Falkland Islands Status can own property in the Falkland Islands<sup>24</sup>. The Falkland Islands Executive Council can grant permission (License to Hold Land) to Non-Permanent Residents and work-permit holders, however, most commonly Non-Permanent Residents are excluded from owning property. Therefore, Non-Permanent Residents form a large part of the rental market, both within FIG housing and the private sector.

<sup>20</sup> FIG Directorate of Policy, Economy & Corporate Services, 2024. [Falkland Islands Census Report](#).

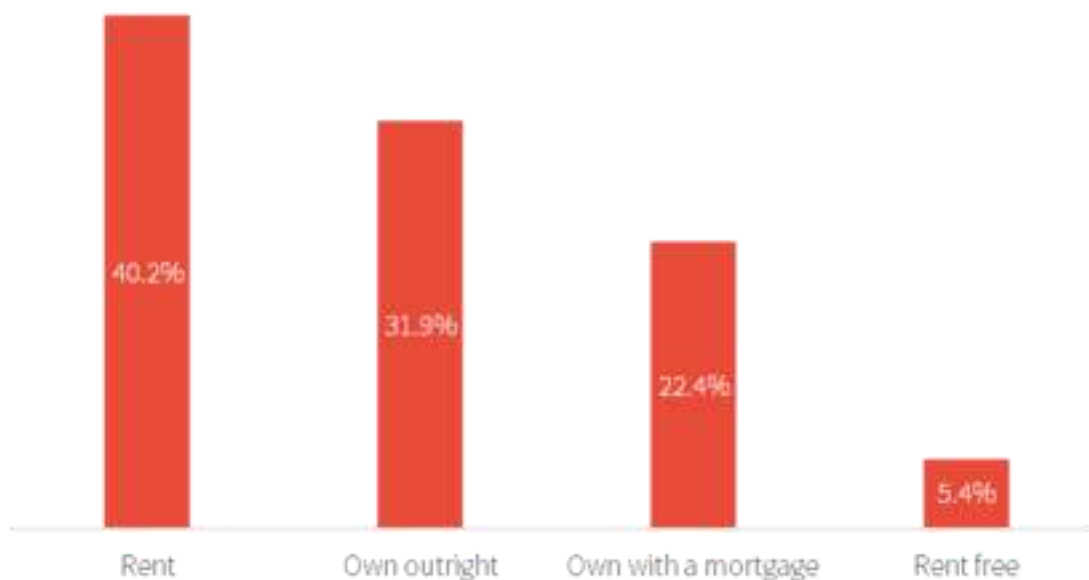
<sup>21</sup> FIG Directorate of Policy, Economy & Corporate Services, 2024. [Falkland Islands Census Report](#).

<sup>22</sup> FIG, 2024. [Approved Estimates of Revenue & Expenditure for the Financial Year 2023/24](#)

<sup>23</sup> Socio-economic Impact Assessment, Maplecroft 2019

<sup>24</sup> FIG, Land Registry Services, [Section 2 \(Land \(Non-residents\) Ordinance 1999\)](#)

Figure 3.3 Households in Stanley by tenure, 2021



Source: FIG Directorate of Policy, Economy & Corporate Services, 2024. [Falkland Islands Census Report](#).

- 3.24 The Falkland Islands Development Plan<sup>25</sup> sets out a housing target of 450 units to be built between 2013 and 2030 (~26.5 units/year). To meet these future demands, the Stanley Town Plan (included within the Falkland Islands Development Plan) has zoned areas for residential housing. Around 30 new dwellings per annum have been delivered since 2016.
- 3.25 Within the FIG Islands Development Plan<sup>26</sup>, proposals for permanent structures to provide transitory accommodation in Stanley (e.g. short-term accommodation for offshore workers) are to be supported within land identified for light industrial uses.
- 3.26 The largest hotel in Stanley is the 70 room Malvina House Hotel. Other hotels include the Waterfront Hotel and Shorty’s Motel, which both have six rooms. Additionally, there are several small bed & breakfast establishments in Stanley, and a 60-hostel style rooms at Lookout Lodge.

### Future Baseline

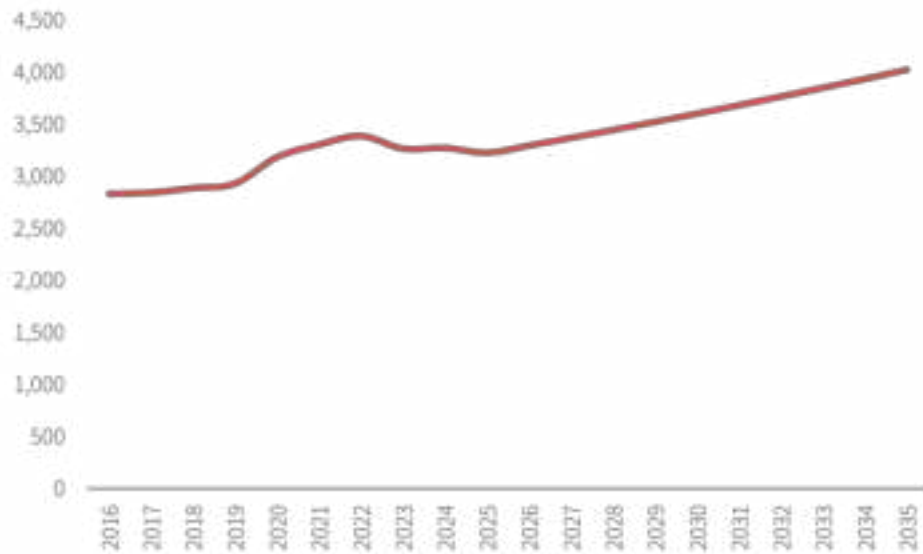
- 3.27 FIG population projections<sup>27</sup> run from 2016 up until 2035. The estimated population on the Falklands according to FIG is 4,025 in 2035. Overall, the FIG data implies a compound annual growth rate (CAGR) of 1.77%.

<sup>25</sup> FIG, Environmental Planning Department, [Falkland Islands Development Plan 2015](#)

<sup>26</sup> FIG, Environmental Planning Department, [Falkland Islands Development Plan 2015](#)

<sup>27</sup> Data provided to Hatch by FIG.

Figure 3.4 FIG Population Projections



Source: Data provided to Hatch by FIG.

- 3.28 Should the development of the Sea Lion Project go ahead this may unlock further major infrastructure project development in the Falkland Islands, including other offshore O&G field development in addition to Sea Lion. The economic impact of cumulative development therefore has potential to significantly impact the future economic environment of the Falkland Islands beyond the impacts predicted for the Sea Lion Project. It is, however, difficult to accurately predict detailed cumulative impacts at this stage and is beyond the scope of this assessment. Should more O&G development come forwards to the planning submission stage, further studies will be required to understand the economic impacts of such development.
- 3.29 It is anticipated that the impact framework and types of impacts for large scale O&G development would be similar in nature to those predicted for the Sea Lion Project, but the scale of impacts are likely to differ based on other projects size and other key variations in their project descriptions.

## 4. Potential Economic Impacts of Sea Lion

4.1 This section sets out the results of the economic impact assessment. It covers:

- The impact on Falkland Islands GDP and FIG revenues;
- Employment effects;
- Migration and population effects; and
- Housing and accommodation effects.

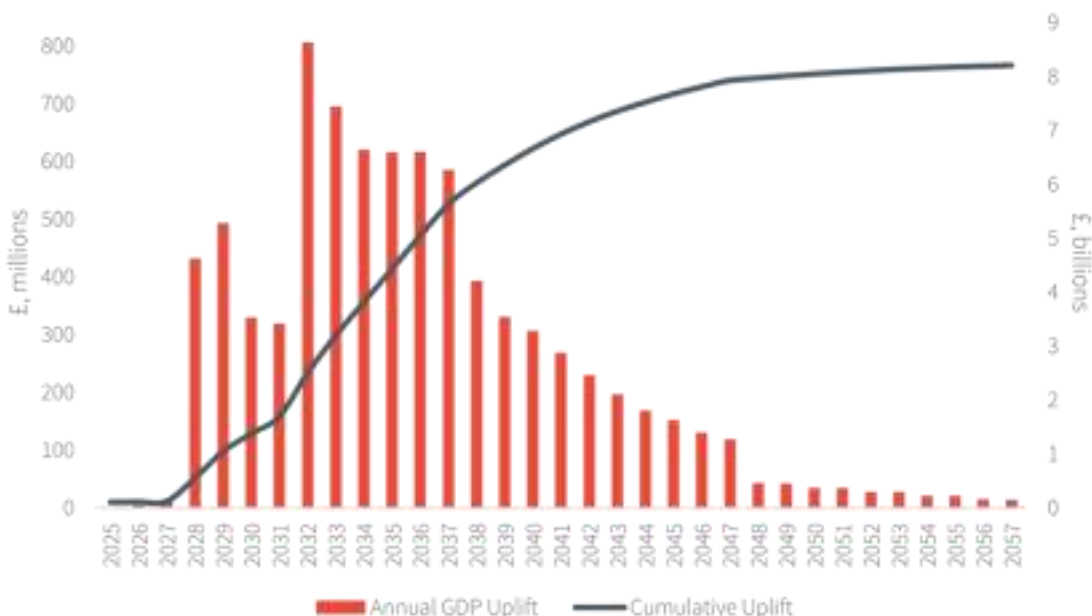
4.2 Further detail on the methods and impacts can be found in the *Technical Report*.

### Impact on the Falkland Islands GDP and FIG Revenues

#### Impact of the Falkland Islands GDP

4.3 GDP on the Falkland Islands was circa £280 million in 2023<sup>28</sup>. The development of the Sea Lion oil field is anticipated to have substantial impacts on GDP. Over the course of the development of the Sea Lion Project, the cumulative uplift to GDP is estimated to be £8.09 billion, or an average of £253 million per annum. This includes profits made by Navitas, as well as total employment costs (wage bill, pension contributions and income taxes paid). The peak year for this uplift is anticipated to be 2032, in which the uplift to GDP is £806 million. This would represent almost a tripling (~290%) of GDP on the current baseline position. As noted elsewhere, the impact on GNI would be more modest, given the repatriation of profits out of the Falkland Islands, and the use of expat workers.

Figure 4.1 Direct GDP Uplift of Navitas Sea Lion



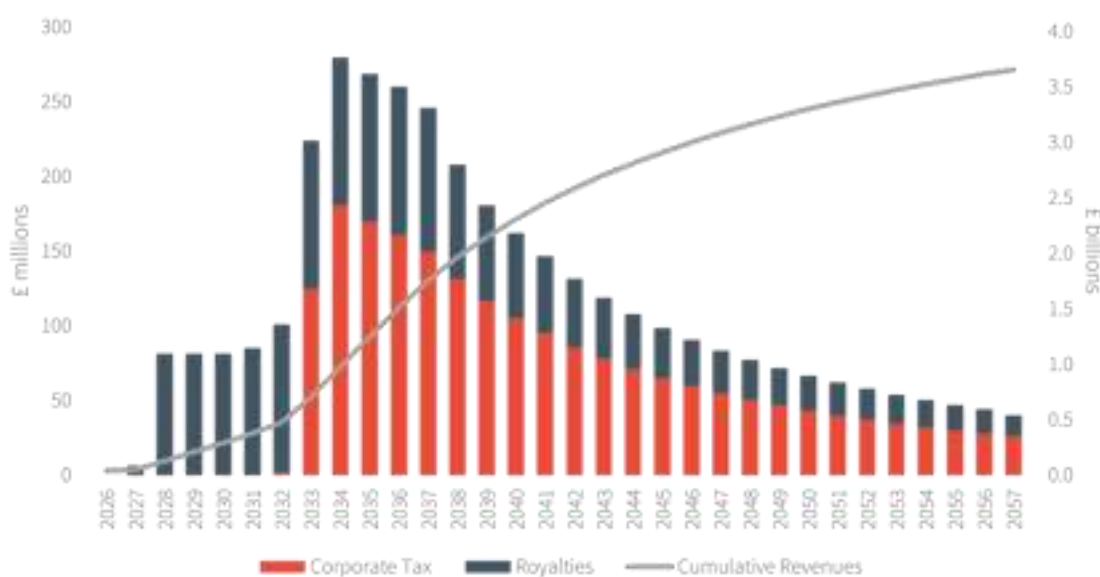
Source: Navitas profit estimates, HR and employment data, Hatch calculations.

<sup>28</sup> FIG Directorate of Policy, Economy & Corporate, 2024. [National Accounts 2023](#)

### Impact on FIG Revenues resulting from taxes and royalty payments

- 4.4 The impact on FIG revenues is derived from revenue and profits based on an assumed long-term average oil price of \$73.98/barrel (converted to £59.18<sup>29</sup>). Estimated oil revenues were provided by Navitas, which are based on the annual oil flow rate set out in Figure 2.2. Royalty payments are calculated by multiplying annual revenues by the 9% royalty rate. Corporate tax paid to FIG is taken from Navitas’s own estimates.
- 4.5 Taken together, these revenue streams from O&G production in the Falkland Islands will amount to £3.60 billion cumulatively over the period, or an average of £109 million per annum, as is shown below in Figure 4.2. The years in which revenues are anticipated to be highest are 2032-2036, with the peak year in 2034, when revenues are set to hit £279 million. For comparison, FIG revenue for the 2023/24 financial year was circa £120 million.<sup>30</sup> Just over half (56%) of the revenue comes from corporate tax. It should be noted that there will also be additional fiscal impacts from employees (e.g. payment of income tax) of Navitas and its supply chain, although these wider fiscal impacts are not quantified in the assessment.
- 4.6 FIG can also expect an increase in revenues from income taxes paid by both onshore and offshore workers. These incomes are negligible in comparison to the corporation taxes and royalties paid by Navitas, but they would represent a more immediate source of Government revenue.

Figure 4.2 Cumulative FIG revenues from Sea Lion oil production



Source: Navitas revenues and profits data. Estimates based on current tax and royalty rates. Current prices used.

<sup>29</sup> Implying a long-term USD/GBP exchange rate of approximately \$1.00:£0.80.

<sup>30</sup> FIG, 2024. [Approved Estimates of Revenue & Expenditure for the Financial Year 2023/24.](#)

## Employment Effects

### Summary

4.7 Figure 4.3 shows the total estimated jobs created as a result of the Sea Lion project. This takes in all sources of economic impact: direct, indirect, induced, super multiplier and infrastructure accelerator jobs. The peak employment of 280 FTE jobs per annum is anticipated to occur in 2027 when Stage 1 (pre first oil drilling and construction) employment has ramped up to peak levels, with significant additional employment demands from construction activity. Employment then drops following completion of onshore construction activity to around 250 FTE jobs while Phase 1 and Phase 2 drilling activity occurs and falls to around 170 FTE jobs at steady state operations.

Figure 4.3 Summary of employment



Source: Hatch, 2024. Direct and indirect jobs based on Navitas estimates and other multiplier jobs are based on Hatch calculations. See the *Technical Report* for details.

4.8 In the shorter term, the increased demand for labour is likely to create significant employment opportunities for local people and could create inflationary pressures on wages. This is particularly likely in the construction sector (and related manual occupations) where there will be strong early demand for labour. Managing immigration in order to allow sufficient people to immigrate and take-up all roles required will be critical to avoid wage inflation becoming a significant challenge in the medium and long term.

### Direct and Indirect Onshore Jobs

4.9 Onshore direct jobs include anyone who is directly employed by Navitas and working onshore. Indirect onshore jobs are jobs in the local (Falkland Islands) supply chain supporting the development of Sea Lion. The onshore direct and indirect jobs cover a range of corporate, drilling & commissioning, hospitality, logistics, transportation roles, as well as other technical roles. Table 4.1 below provides a list of all anticipated onshore direct and indirect jobs. Importantly, it also sets out whether these are anticipated to be filled by expats or people

already living on the Falkland Islands. These assumptions come from Navitas’s latest workforce planning data.

| Table 4.1 List of direct and indirect onshore jobs |   |                 |
|--|---|-----------------|
| Role Description                                   | Origin  | Indirect/Direct |
| <b>Navitas Falkland Islands Corporate Office</b>   |   |                 |
| Country Manager                                    | FI Local  | Direct          |
| Office Manager                                     |   |                 |
| Commercial Manager                                 |   |                 |
| Environmental Advisor                              |   |                 |
| Accountant   |   |                 |
| <b>Shorebase</b>                                   |   |                 |
| Base Manager                                       | Navitas B2B Expat                               | Direct          |
| Logistics Supervisor                               |   |                 |
| Onshore DMC  |   |                 |
| HSE Advisor  |   |                 |
| Waste Manager                                      | FI Local  |                 |
| Aviation Co-ordinator                              |   |                 |
| Onshore Transport Logistics                        |   |                 |
| Supply Base Team                                   | Supply Base Contractor                          | Indirect        |
| Back Office Support Personnel                      |   |                 |
| Truck Drivers                                      | Local Contractor                                |                 |
| Security   |   |                 |
| <b>Navitas Drilling and Commissioning Office</b>   |   |                 |
| Rig Superintendent                                 | Navitas B2B Expat                               | Direct          |
| Junior Drilling Engineer                           |   |                 |
| SURF Operations Manager                            | Contractor B2B Expat                            | Direct          |
| SURF Operations Deputy                             |   |                 |
| FPSO Hook-up Manager                               |   |                 |
| FPSO Team  |   |                 |
| <b>Helicopter Team</b>                             |   |                 |
| Pilots   | Contractor B2B Expat                            | Direct          |
| Co-pilots  |   |                 |
| Chief Engineer                                     |   |                 |
| Engineer   |   |                 |
| Flight Operations/Planning                         |   |                 |
| Search and Rescue Crew                             |   |                 |
| Survival Suits                                     | Local Contractor                                | Indirect        |
| Ground Handlers                                    |   |                 |
| Terminal Staff                                     |   |                 |
| Security   |   |                 |
| Additional Staff – Stanley & Mount Pleasant        |   |                 |
| <b>Accommodation<sup>31</sup></b>                  |   |                 |
| Hotel Management                                   | Hotel Contractor, workforce assumed to be expat | Indirect        |
| Hotel House Cleaning                               |   |                 |
| Hotel Catering                                     |   |                 |
| Hotel Security                                     |   |                 |
| Hotel Maintenance                                  |   |                 |
| Housing Management                                 | Local Contractor, workforce assumed to be expat |                 |
| Housing Cleaning, Maintenance, etc.                |   |                 |
| <b>Local Operations</b>                            |   |                 |
| Local Business Services (Lawyers, etc.)            | Local Contractor                                | Indirect        |
| Local Logistics & Procurement                      |   |                 |

<sup>31</sup> Please note that the Management may be local, but at least some of the cleaning, catering security and maintenance staff are likely to be recruited from overseas.

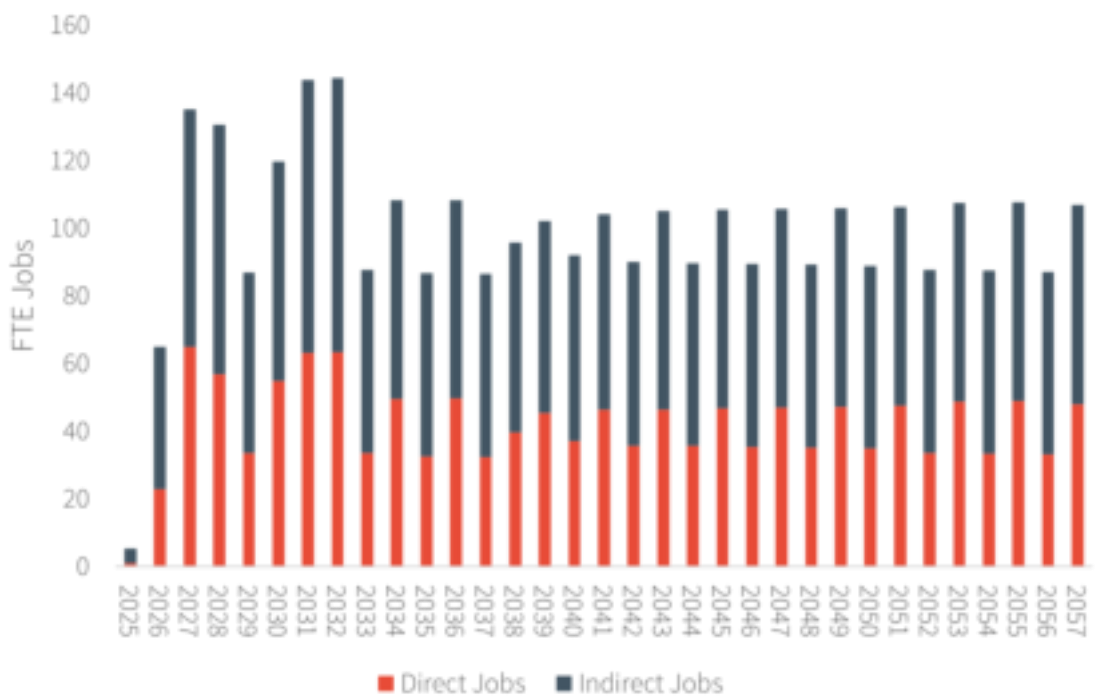
| Role Description                                    | Origin               | Indirect/Direct |
|---|----------------------|-----------------|
| Minibus and Coach Drivers                           |                      |                 |
| Local Freight Forwarding/Customs                    |                      |                 |
| Local Construction                                  |                      |                 |
| <b>Drilling and Commissioning Service Companies</b> |                      |                 |
| Mud Plant   | Contractor B2B Expat | Direct          |
| Cement Plant  |                      |                 |
| QA/QC   |                      |                 |
| Wellheads and OCTG                                  |                      |                 |
| Running Tools & Fishing                             |                      |                 |
| Measurements Rep (LWD etc.)                         |                      |                 |
| OSRL/Lifting Trainers/CCUs                          |                      |                 |
| MODU's Logs Team                                    |                      |                 |
| Construction Vessels' Team                          |                      |                 |
| FPSO Logs Team                                      |                      |                 |
| Service Company Representatives                     |                      |                 |

Source: Navitas HR data, 2024. \*In the oil and gas industry, B2B roles refer to positions where two workers share the same job but work on alternating shifts. This is common in offshore and remote site operations, where continuous coverage is needed. Typically, one worker will be on duty for a set period (e.g., 28 days on) while the other is off (e.g., 28 days off), and then they switch.

4.10 Figure 4.4 below shows the expected number of direct and indirect jobs for each year of Navitas' development of Sea Lion:

- There are expected to be an average of approximately 60 onshore direct FTE jobs and 60 onshore indirect FTE jobs per annum from 2025 to 2057;
- The peak number of FTE jobs is expected to occur during Phase 2 of the Sea Lion Project (while SimOps occurs) in 2031, with around 100 direct FTE jobs and circa 80 indirect FTE jobs;
- During steady state production after Phase 2, while no well construction is occurring, there are estimated to be an average of around 60 onshore direct FTE jobs per annum and approximately 55 onshore indirect FTE jobs per annum.

Figure 4.4 Expected number of onshore direct and indirect employees (FTE jobs)



Source: Hatch calculations are based on employment estimates provided by Navitas, which are informed by internal projections and HR data, 2024.

- 4.11 The development of the Sea Lion Project will bring employment opportunities for the current local population of the Falkland Islands, whilst also drawing on specialist expat labour. Figure 4.5 provides a time-series for how many expats are expected to be taking up onshore jobs during the course of the Sea Lion Project. Overall, around 25% of the person years of FTE employment from 2025 to 2057 are expected to be filled by expats. The per annum average of expat jobs between 2025 and 2057 is 47 FTE jobs.
- 4.12 Jobs that are expected to be filled by locals or local contractors, on average, will be at around 55 FTE jobs per annum between 2025 and 2057, peaking in 2027 and 2031 at 80 FTEs. For these roles, it is assumed that almost all will need to be backfilled (i.e. there will be a requirement for existing vacated roles to be filled). The exception to this is the country manager role which already exists on the Falkland Islands and therefore does not require backfilling. The implications of backfilling roles on migration are further discussed in relation to migration, population and housing below.

Figure 4.5 Categorisation of expat and local direct and indirect roles



Source: Hatch, based on Navitas HR data.

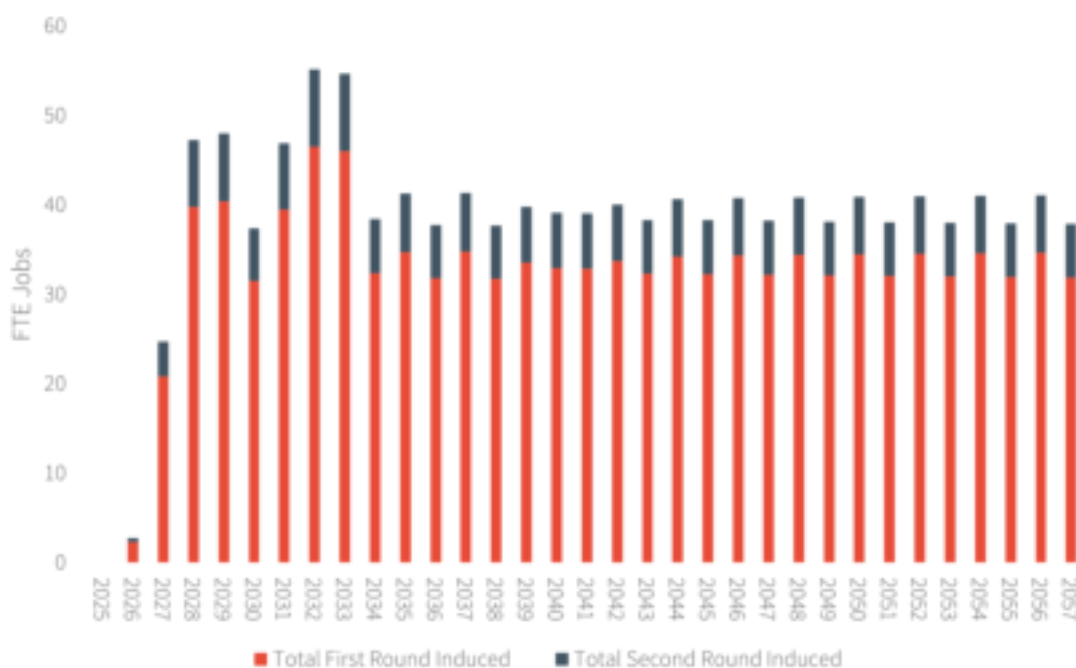
## Induced

- 4.13 Induced jobs are created as a result of the additional personal expenditure in the Falkland Islands economy by Sea Lion Project’s direct and indirect employees<sup>32</sup>. These jobs are calculated using estimated multipliers, based on the proportion of the earnings of FTE jobs which is anticipated to be spent in the Falkland Islands.<sup>33</sup> The *Technical Report* contains further explanation of the methodology.
- 4.14 Figure 4.6 below shows annual induced jobs, resulting from the Sea Lion Project. Most of this is first round effects but there is a small second round effect on top of this. Over the course of the project, it is anticipated that there will be an average of approximately 40 FTE induced jobs per annum, with the peak employment occurring when Phase 1 and 2 drilling activity occurs.

<sup>32</sup> There are further induced effects from the “super-multiplier” jobs, which we describe later.

<sup>33</sup> Please see the *Technical Report* for a detailed explanation of the workings to derive induced employment impacts.

**Figure 4.6 Expected number of first round and second round induced jobs**

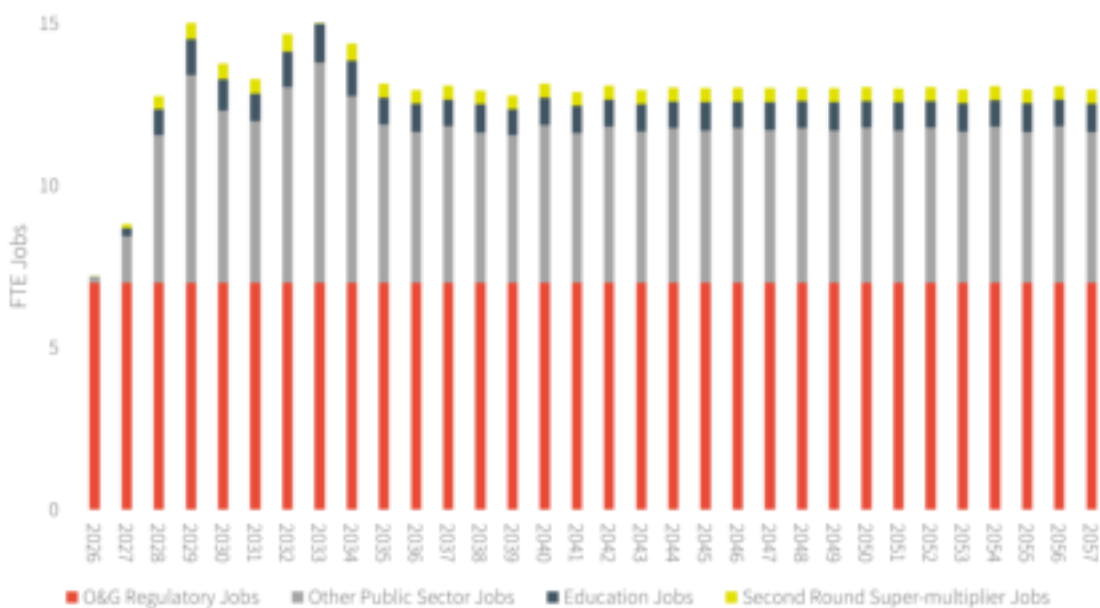


Source: Hatch calculations are based on employment estimates provided by Navitas, which are informed by internal projections and HR data, 2024.

### Super Multiplier jobs

- 4.15 Super multiplier jobs are the regulatory, education and other public sector jobs required to support the governmental administration and resource implications of the Sea Lion Project as well the rise in population caused by immigration of workers and accompanying dependents (see paragraphs 4.27 to 4.50 for the information on quantified rise in population resulting from in migration to the Falkland Islands). This then also generates an additional feedback loop via induced effects.
- 4.16 On average, it is expected that these roles will amount to 13-14 FTE jobs per annum. A breakdown of the super multiplier jobs is shown below in Figure 4.7. Based on consultation with FIG it is anticipated that 7 FTE roles will be required for O&G regulation. There are expected to be circa 1 FTE educational roles required and a further 5 FTE jobs on average across the project required in other public sector services. This increase in jobs will also generate a small amount of additional demand on the public sector through feedback loops. It is anticipated these will be in the region of 0.5 FTE jobs across the course of the Sea Lion Project on average.

**Figure 4.7 Super multiplier jobs**



Source: Hatch calculations are based on employment estimates provided by Navitas, which are informed by internal projections and HR data, 2024.

### Infrastructure Accelerator

4.17 Infrastructure accelerator jobs are those that are required to build the necessary onshore infrastructure and accommodation resulting from the Sea Lion Project. To inform this assessment, Navitas provided information on the timeline of capital infrastructure build out and phasing of the planned investment as set out in Figure 4.8 below.

**Figure 4.8 Proposed infrastructure directly related to the Sea Lion Project**

| Type of Infrastructure                              | 2025                  | 2026                       | 2027    |
|---|-----------------------|----------------------------|---------|
| Public Works and Civil Engineering                  |                       | TDF Upgrades               |         |
|   |                       | 17 FTEs                    | 11 FTEs |
| Very Capital Intensive Works and Equipment Purchase |                       | Supply Base / LMP Upgrades |         |
|   |                       | 8 FTEs                     | 2 FTEs  |
| Housing/Hotel                                       |                       | Sea Lion "Hotel"           |         |
|   | 2 FTEs                | 11 FTEs                    | 3 FTEs  |
| Housing/Hotel                                       | Navitas Staff Housing |                            |         |
|   | 19 FTEs               | 29 FTEs                    | 7 FTEs  |
| Public Works and Civil Engineering                  |                       | Heliport                   |         |
|   | 4 FTEs                | 15 FTEs                    | 3 FTEs  |
| Public Works and Civil Engineering                  |                       | Telecoms                   |         |
|   |                       | 5 FTEs                     |         |

Source: Hatch, 2024. Based on information provided by Navitas.

- 4.18 The construction jobs resulting from the capital investments detailed above are estimated by applying a labour cost share and then dividing the labour costs of building infrastructure by an estimated total labour cost per construction sector employee.
- 4.19 Table 4.2 provides annual totals for infrastructure accelerator jobs, showing the split between the annual employment for infrastructure related directly to the Sea Lion Project and the estimated employment to build the additional housing needed to meet housing demands resulting from the Sea Lion Project.
- 4.20 Based on the phasing set out above, all but 11 accelerator jobs will be required from 2025 to 2028 (during Phase 1 of the project). The anticipated FTEs per annum between 2025 and 2028 averages at around 90 FTEs. Currently, no infrastructure is expected to be built post-2027<sup>34</sup>. The number of FTE jobs for each year from 2025 to 2027 is set out in Table 4.2 below.

|  | Year      |            |           |
|--|-----------|------------|-----------|
|  | 2025      | 2026       | 2027      |
| FTEs related to proposed infrastructure directly related to the Sea Lion Project (including Navitas housing) | 40        | 95         | 25        |
| Estimated number of FTEs required to build additional housing  | -         | 10         | 50        |
| <b>Total FTE jobs</b>  | <b>40</b> | <b>105</b> | <b>75</b> |

Source: Hatch calculations 2024. Numbers are rounded to the nearest 5 FTE jobs.

Note: 10 FTEs in 2032 and 1 FTE in 2033 will be needed to build additional housing.

- 4.21 All of the infrastructure accelerator jobs are assumed to be short-medium term and therefore present no long-term demand on public services and accommodation. However, they do have potential to create some additional short-medium term demands.
- 4.22 In addition, it should be noted that there could be additional cumulative impacts of overlapping construction projects on the Falkland Islands.

### Offshore Jobs

- 4.23 Offshore jobs (i.e. jobs that are primarily based on infrastructure located offshore in the Falkland Islands offshore designated area<sup>35</sup>) will be located on various offshore infrastructure during different phases of the project including drilling units and vessels (vessels include emergency response and rescue, anchor handling tug supply, construction, platform supply, floating production storage and offloading and multi-role support). The jobs include roles on the drilling, production and maintenance crews, marine operations, health and safety roles and catering and support roles.
- 4.24 The average annual offshore employment requirement from 2026 to 2033 is estimated to be 240 FTE jobs, peaking at just under 370 jobs. This falls to a steady state of circa 90 jobs per annum from 2034 to 2057.

<sup>34</sup> Please see the *Technical Report* for a detailed explanation of how the infrastructure accelerator jobs were calculated.

<sup>35</sup> Also known as the FOCZ (Falklands Outer Conservation Zone) - this is essentially the EEZ (Exclusive Economic Zone), but it is referred to as the Designated Area in the Falklands Oil and gas legislation.

- 4.25 The likelihood of local Falkland Islands residents filling offshore jobs located at the Sea Lion O&G field depends on several factors, including the availability of skilled labour, the size of the economy and the training programs provided. While some offshore based positions could be filled by local residents, it is generally assumed that these highly specialised roles will require expertise that is not readily available with the Falkland Islands labour market and such roles are unlikely to result in permanent migrations or significant time spent on the Falkland Islands. As such, the economic impact of these roles is assumed to be limited.
- 4.26 It should, however, be noted that offshore jobs taken by non-residents of the Falkland Islands would contribute employment taxes. This is because non-resident employees are subject to a flat rate of 21% on their gross wages<sup>36</sup>. This system ensures that non-resident workers contribute to the local economy through taxation, supporting public services and infrastructure development.

## Migration and Population Change

---

- 4.27 As set out earlier, in 2021 the usual resident population of the Falkland Islands was 3,662. FIG population projections<sup>37</sup> anticipated a rise from 2,834 people in 2016 to 4,024 in 2035, a CAGR of +1.77%.
- 4.28 The relatively small scale of population makes the Falkland Islands particularly sensitive to a range of impacts which result from increases in population, due to the development of major infrastructure projects such as the Sea Lion Project. For this reason, it is useful to develop best estimates of projected population increases, in order to feed into the assessment of knock-on social impacts of population increases.
- 4.29 Altogether, the development of the Sea Lion Project is anticipated to result in demand for 5,700 person years of employment across 32 years, or an average of 180 roles per annum. Some of these roles will result in requirement for in-migration and the assessment above has indicated which roles are intended to be filled by local residents and which will be filled by expats and where there will be requirements for backfilling roles. Rotational roles (~30 FTEs per annum) are not expected to bring dependents with them, therefore the in-migration resulting from employment is equivalent to an average of ~150 FTE roles per annum throughout the course of the Sea Lion Project. These roles will result in the additional migration of families and dependents. Based on insights provided by Navitas it is assumed that 28% of the direct and indirect roles requiring migration will bring families/dependents with them. In-migration resulting from wider demand for induced, super multiplier roles, as well as roles requiring backfilling, are assumed to bring additional family/dependents with them.
- 4.30 The long-term implications for migration and population change have been calculated based on the scale of expat direct, indirect onshore roles, existing roles which require backfilling, induced roles and super multiplier roles. Due to their short-medium term temporary nature and lack of requirement for housing, Infrastructure accelerator roles are not quantified in the core assessment of migration and population change but are considered separately. As a starting point it has been assumed that 1 FTE role in these categories corresponds to an equal increase of 1 in the population and this is scaled up on a linear basis.

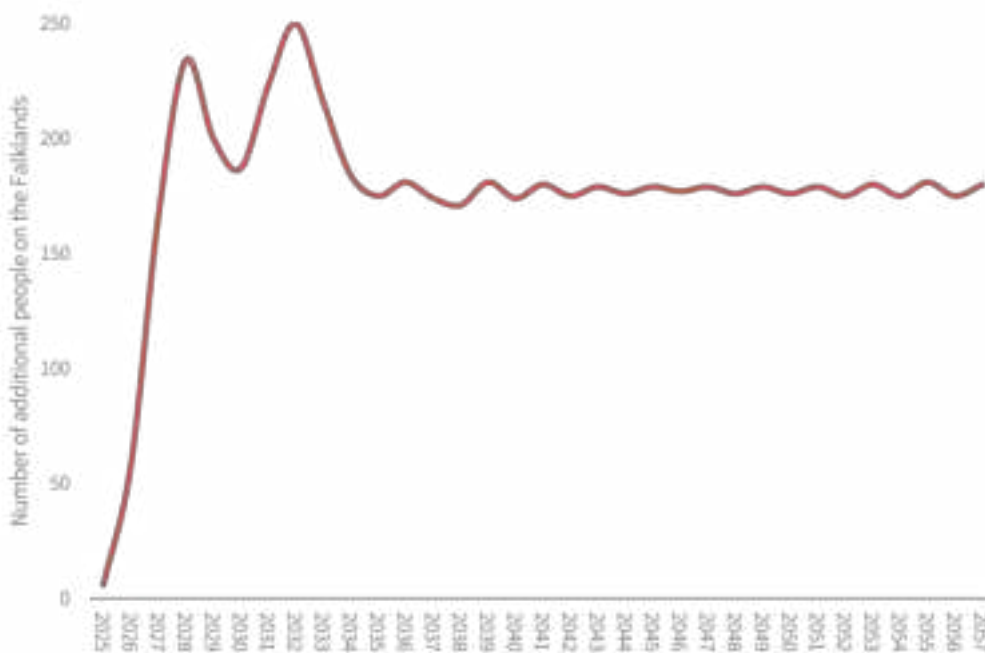
<sup>36</sup> FIG, Falkland Islands Legislation, "Taxes Ordinance 1997".

<sup>37</sup> Based on FIG data provided to Hatch on February 10 2025.

- 4.31 The migration resulting from employment is equivalent to an average of 160 FTE roles per annum across the course of the Sea Lion Project. Many of these roles will result in the additional migration of families and dependents.
- 4.32 For every 100 FTE migrant jobs, it is assumed there will be 100 people. Where it is assumed that migrants will be bringing dependents, it is also assumed that they will each bring 0.27 dependents. For these additional people migrating to the Falkland Islands to take up induced and super-multiplier, or to backfill roles, it is assumed there will be an additional 27 dependents. Of the 27 dependents, approximately 17 will be school aged children. For more details on how these assumptions are informed, see the *Technical Report*.
- 4.33 This additional population with the increase of employees migrating to the Falkland Islands places a total expected peak in migration of 250 people coming into the Falkland Islands in 2032<sup>38</sup>. This peak is focused on here as it is used for the purpose of SIA.
- 4.34 It is assumed that, at peak (2032) there is an additional 7% of population resulting from the immigration of direct, indirect, induced and super-multiplier employees, as well as their families and/or dependents. It is worth noting that this assumes that there is only one working migrant per new household.
- 4.35 The population would fall from the peak to a steady state of between 170 to 180 additional people on the Falkland Islands, which is an approximately 5%-6% increase on the baseline population.
- 4.36 It should be noted that on top of this long-term population uplift there will be an additional infrastructure accelerator employment demand, some of which with demands for temporary accommodation, of approximately 90 FTEs per annum across the three-year onshore construction phase.

<sup>38</sup> Onshore only.

**Figure 4.9 Migration to Falkland Islands associated with the Sea Lion Project**



Source: Hatch calculations are based on employment estimates provided by Navitas, which are informed by internal projections and HR data, 2024.

## Housing and Accommodation

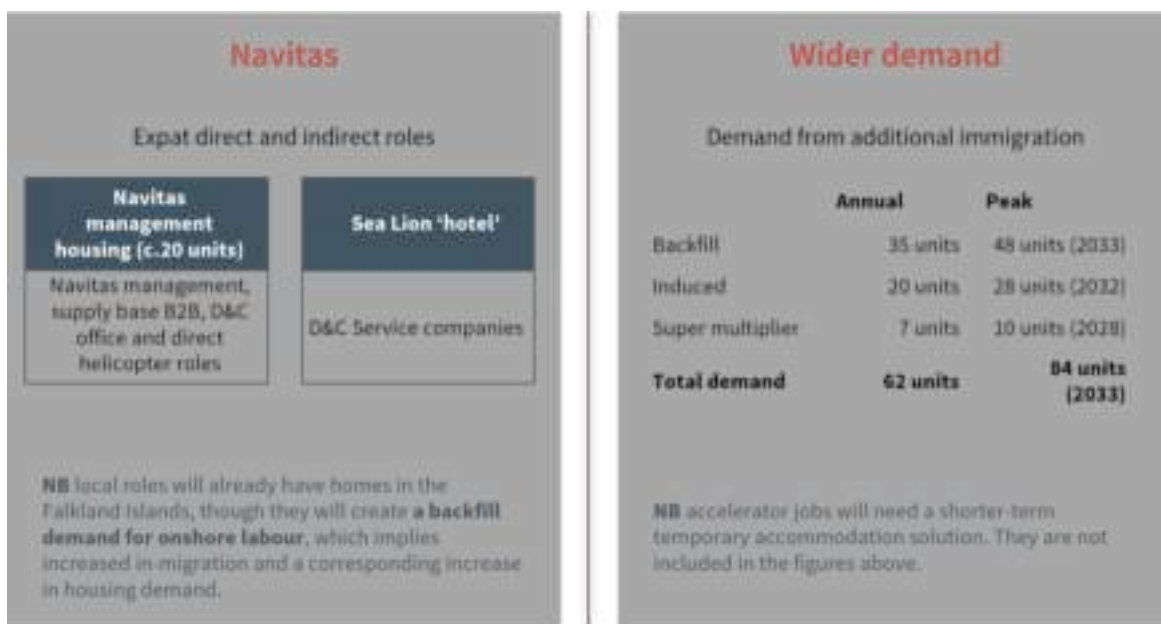
- 4.37 Over the past decade, the Falkland Islands have seen a steady increase in housing development. From 2012 to 2015, more than 126 houses were built and occupied in Stanley, the capital<sup>39</sup>. The trend continued, with additional housing projects being completed in subsequent years.
- 4.38 As set out earlier, there are currently around 1,350 households in Stanley, with a further circa 150 homes located in Camp and on the outer islands. This excludes Mount Pleasant, which has around 230 homes. Currently, the Falkland Islands Development Plan has a target of an average of 26.5 new homes per annum in Stanley. This target is based on 2013 data and housing estimates. It is understood that the housing market is very tight; according to FIG the vacancy rate on the Islands was 9% in 2016. The most critical issue identified is the current and future shortage of rental housing, which constrains the ability of the Falkland Islands to attract and retain a sufficient workforce<sup>40</sup>. It should be noted that this included assumed population growth driven by oil & gas development. A wider picture of the housing market can be found in the Housing sub-section of the Economic Baseline (paragraphs 3.21 and 3.26).
- 4.39 Navitas’ development of the Sea Lion Project will increase demand for housing on the Falkland Islands during the lifecycle of the project. This is due not only to in-migration of direct and indirect employees who will require accommodation when working on the Falkland Islands, but also due to the roles requiring backfilling, and the induced and super multiplier jobs. Housing requirements for each direct and indirect job role can be found in the *Technical Report*.

<sup>39</sup> [Falklands have built and occupied over 126 houses from 2012 to 2015 — MercoPress](#)

<sup>40</sup> FIG – Policy and Economic Development Directorate, “Housing: Supply, Demand and Policy Options”, 2020. Please note that future housing projections of supply and demand include population uplift from oil and gas development.

- 4.40 Housing and accommodation demand arising from the Sea Lion Project can be split into the following categories:
- Housing and accommodation demand from the direct and indirect employment required to build and operate the Sea Lion Project, which will be met by Navitas (for management and rotational staff);
  - Housing and accommodation needed for the additional population resulting from induced, indirect, infrastructure accelerator and super multiplier employment impacts: for the purposes of this assessment this is assumed to be required to be met by the private development sector on the Falkland Islands; and
  - Temporary accommodation required to accommodate non-local construction workers.
- 4.41 Temporary accommodation required for non-local construction workers employed to deliver Sea Lion onshore infrastructure requirements will be considered as part of Navitas’s accommodation strategy and would not place long term demands on housing and accommodation in the Falkland Islands. Therefore, this is not considered further in this section. More details on the impacts of this temporary accommodation are included in the SIA.
- 4.42 Figure 4.10 provides an overview of both Navitas-provided accommodation and the anticipated wider excess demand for housing that the private sector would have to fill. A one-year lag is built into the model for housing demand, as it is expected that the private sector will need time to respond to increased demand for housing.

Figure 4.10 Navitas accommodation supply and wider private sector demand.



Source: Hatch (2025)

### Navitas-provided accommodation

- 4.43 Navitas have committed to building c.20 housing units for its helicopter crews, direct supply base employees and management roles in their D&C offices. It is expected that the units will allow for dual occupancy, and potentially triple occupancy in the initial stages of the project. This implies supply for at least 40 employees to live in Navitas-built homes. On average, based on the economic modelling undertaken, there is demand for approximately 20 direct employees

living in Navitas-provided homes throughout the Sea Lion project. At peak occupancy (2027) there is demand for some 38 direct Navitas employees.

- 4.44 The Sea Lion Project's remaining expat employees, that is, all of the D&C service contractors, will be housed in the Sea Lion 'hotel'. Currently, the numbers of rooms in the Sea Lion 'hotel' is still tentative, for the purpose of this assessment it is assumed there will be provision of around 140 beds. It should be noted that this number is subject to further evaluation by Navitas. There is demand for approximately 11 FTE D&C contractors each year, with the peak occupancy for onshore workers coming in 2031 when 21 D&C contractors will be staying in the Sea Lion 'hotel'. The hotel will also accommodate offshore workers when they are transferring to and from their offshore posts, which is why the number of beds is higher than the demand for onshore employee occupancy.

#### **Wider demand**

- 4.45 As for Falkland Island locals (people who are already residing on the Islands) who may be hired by Navitas / the Sea Lion Project, it is assumed they will already have existing accommodation. Nevertheless, in-migration to backfill the jobs they leave is anticipated to increase housing demand. Similarly, in-migration associated with induced job opportunities and super-multiplier jobs in the public sector will also increase demand for additional housing.
- 4.46 The housing demand has been calculated on the basis of each additional FTE to the Falkland Islands requiring 0.5 housing units on average. This is because many of the roles will be on a temporary basis and therefore are unlikely to require a long-term housing solution. In addition, all of the offshore roles and infrastructure accelerator roles are assumed to require no demand for housing. This is because offshore jobs will be located offshore where personnel will be accommodated on vessels and construction workers are assumed to either be local and have access to the existing housing stock or they will be accommodated in temporary accommodation due to the short term nature of the roles. The scale of temporary accommodation is quantified in the Environmental Impact Assessment and is considered further in the SIA.
- 4.47 Peak demand for housing is expected to occur during Phase 2 in 2033, where some additional 84 homes (over and above the management housing and accommodation provided by Navitas) will be required to meet the wider requirement for accommodation. It is worth noting that in Phase 1, there is a peak in housing demand with 78 homes needed by 2029 to accommodate the increase in migration. This ramp up to 2029 corresponds with approximately ~20 homes needed each year between 2026 and 2029.
- 4.48 Comparing this to the delivery target of ~26.5 new homes per annum this represents a notable short term uplift on the business as usual position of housing need to meet peak demand for housing during Phase 1.
- 4.49 It should be noted that the long-term steady state demand for housing is considerably lower than the peak demand for housing, at approximately 60-70 housing units. This may represent a more accurate picture of the demand for housing. In reality, short term peak demand can be partially met by the supply in the accommodation sector (including the Sea Lion hotel provided for by Navitas) and short-term rentals, although the size of the Falkland Islands makes scale of this provision limited.
- 4.50 This demand for housing will also occur at the same time as a demand for temporary accommodation resulting from the influx of construction workers in Phase 1 of the Sea Lion Project, thus placing further demands on the accommodation supply as a whole.

## DISCLAIMER AND LIMITATIONS OF USE

This Report was prepared for Navitas Petroleum Development and Production Limited ( the “Client”) by Hatch Associates (“Hatch”) based in in part upon information believed to be accurate and reliable from data supplied by or on behalf of Client, which Hatch has not verified as to accuracy and completeness. Hatch has not made an analysis, verified or rendered an independent judgement as to the validity of the information provided by or on behalf of the Client. While it is believed that the information contained in this Report is reliable under the conditions and subject to the limitations set forth herein, Hatch does not and cannot warrant nor guarantee the accuracy thereof or any outcomes or results of any kind. Hatch takes no responsibility and accepts no liability whatsoever for any losses, claims, expenses or damages arising in whole or in part from any review, use of or reliance on this Report by parties other than Client.

This Report is intended to be read as a whole, and sections should not be read or relied upon out of context, and any person using or relying upon this Report agrees to be specifically bound by the terms of this Disclaimer and Limitations of Use. This Report contains the expression of the professional opinions of Hatch, based upon information available at the time of preparation. Unless specifically agreed otherwise in Hatch’s contract of engagement with the Client, Hatch retains intellectual property rights over the contents of this Report.

The Report must be read in light of:

- the limited readership and purposes for which it was intended;
- its reliance upon information provided to Hatch by the Client and others which has not been verified by Hatch and over which it has no control;
- the limitations and assumptions referred to throughout the Report;
- the cost and other constraints imposed on the Report; and
- other relevant issues which are not within the scope of the Report.

Subject to any contrary agreement between Hatch and the Client:

- Hatch makes no warranty or representation to the Client or third parties (express or implied) in respect of the Report, particularly with regard to any commercial investment decision made on the basis of the Report;
- use of the Report by the Client and third parties shall be at their own and sole risk, and
- extracts from the Report may only be published with permission of Hatch.

It is understood that Hatch does not warrant nor guarantee any specific outcomes or results, including project estimates or construction or operational costs, the return on investment if any, or the ability of any process, technology, equipment or facility to meet specific performance criteria, financing goals or objectives, or the accuracy, completeness or timeliness of any of the data contained herein. Hatch disclaims all responsibility and liability whatsoever to third parties for any direct, economic, special, indirect, punitive or consequential losses, claims, expenses or damages of any kind that may arise in whole or in part from the use, review of or reliance upon the Report or such data or information contained therein by any such third parties. The review, use or reliance upon the Report by any such third party shall constitute their acceptance of the terms of this Disclaimer and Limitations of Use and their agreement to waive and release Hatch and its Client from any such losses, claims, expenses or damages. This Report is not to be referred to or quoted in whole or in part, in any registration statement, prospectus, fairness opinion, public filing, loan agreement or other financing document.

Readers are cautioned that this is a preliminary Report, and that all results, opinions and commentary contained herein are based on limited and incomplete data. While the work, results, opinions and commentary herein may be considered to be generally indicative of the nature and quality of the subject of the Report, they are by nature preliminary only and are not definitive. No representations or predictions are intended as to the results of future work, nor can there be any promises that the results, opinions and commentary in this Report will be sustained in future work. This Disclaimer and Limitations of Use constitute an integral part of this Report and must be reproduced with every copy.

# HATCH



[www.hatch.co.uk](http://www.hatch.co.uk)

London: 0207 336 6188 Manchester: 0161 234 9910